Dugway Proving Ground
Restoration Advisory Board Meeting

November 17, 2008
Eagle's Nest – Building 1005, Tooele Army Depot
Tooele, Utah

UPDATE
RCRA Facility Investigation

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Presentation

- **Status of RFI for SWMUs**
- **Work Completed Since May 2008**
- **Current Field Work**
- **Future Work Activity**
- **Briefing: Removal Actions at SWMUs 4 and 114**

RCRA Corrective Action Process

- Solid Waste Management Units (SWMU) Definition
  - "Any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released."
- Four Main Steps
  - RCRA Facility Assessment (RFA)
  - RCRA Facility Investigation (RFI)– Phase I
  - RCRA Facility Investigation (RFI)– Phase II
  - Corrective Measures Study (CMS)

Report Process

- RFI reports undergo 3 iterations
  - DRAFT: Internal Army review includes DPG and Corps of Engineers; comments submitted and resolved
  - DRAFT-FINAL: Submitted to UDEQ for review; comments submitted and resolved
  - FINAL: Incorporates all UDEQ comments; legally-binding document incorporated into DPG's RCRA Part B Permit
- Same process for other documents (e.g., Work Plans; Work Plan Variances)

Status of RFI SWMUs

Priority 1 (*32 SWMUs*)

- **24 SWMU RFI Final Reports DSHW Approved**
  - **SWMUs 3, 16, 17, 18, 21, 41, 44, 52, 54, 65, 79, 98, 172, 173, 177, 180, 194 (A,B,C), 199, 200, 207, 212, 213, and 215**
- **1 SWMU RFI Final Reports in Preparation**
  - **SWMU 60**
- **1 SWMU RFI in Draft Final Report Review at UDEQ**
  - **SWMU 208**
- **4 SWMUs in RFI Draft Stage**
  - **SWMUs 4, 15, 32, and 192**
- **2 SWMUs with Upcoming Removal Actions**
  - **SWMUs 4 and 35**

Status of RFI SWMUs

Priority II (*39 SWMUs*) (cont.)

- **35 SWMU RFI Final Reports Approved by DSHW**
  - **SWMUs 6, 8, 10, 19, 23, 25, 56, 56B, 75, 77, 97, 113, 115, 116, 118, 133, 150, 154, 171, 179, 183, 185, 188, 189, 193, 197, 201, 205, 206, 209, 210, 211, 214, and 216**
- **2 SWMU RFI Final Reports in Preparation**
  - **SWMUs 11 and 61**
- **1 SWMU with RFI Reports in Draft Stage**
  - **SWMU 31**
- **1 SWMU with Upcoming Removal Actions**
  - **SWMU 114**

Work Completed Since May 2008

Reports Submitted

- Responses to State comments and Final RFI reports submitted and approved for SWMUs 41, 173, 177, 209, and 210
- Draft Final RFI Report submitted for SWMU-208
- Work Plan submitted for removal action at SWMU-35

Field Work

- Sampling of sediment in tanks at SWMU-41
- Surface soil sampling at SWMU-15

SWMU-15: Location of former target site in Rising Sun Grid

Multi-Increment Surface Soil Sampling at SWMU-15

Staking out the 150x200 investigative area

Collecting 1 of 50 increment (composite) samples

Sampler with partially completed sample.

Increments collected every 42 feet along the path of rows and columns 30 ft and 40 ft apart, respectively.

Tank Sediment Sampling at SWMU-41

Separating water from sediment.

Accessing Tank 2 for sediment sample collection

Future Activities

Reports

- **Final RFI Reports for SWMUs 4, 11, 60, and 208**
- **Revisions to Final RFI Report for SWMU 61**
- **Draft RFI Reports for SWMUs 15, 31, 35, and 114**

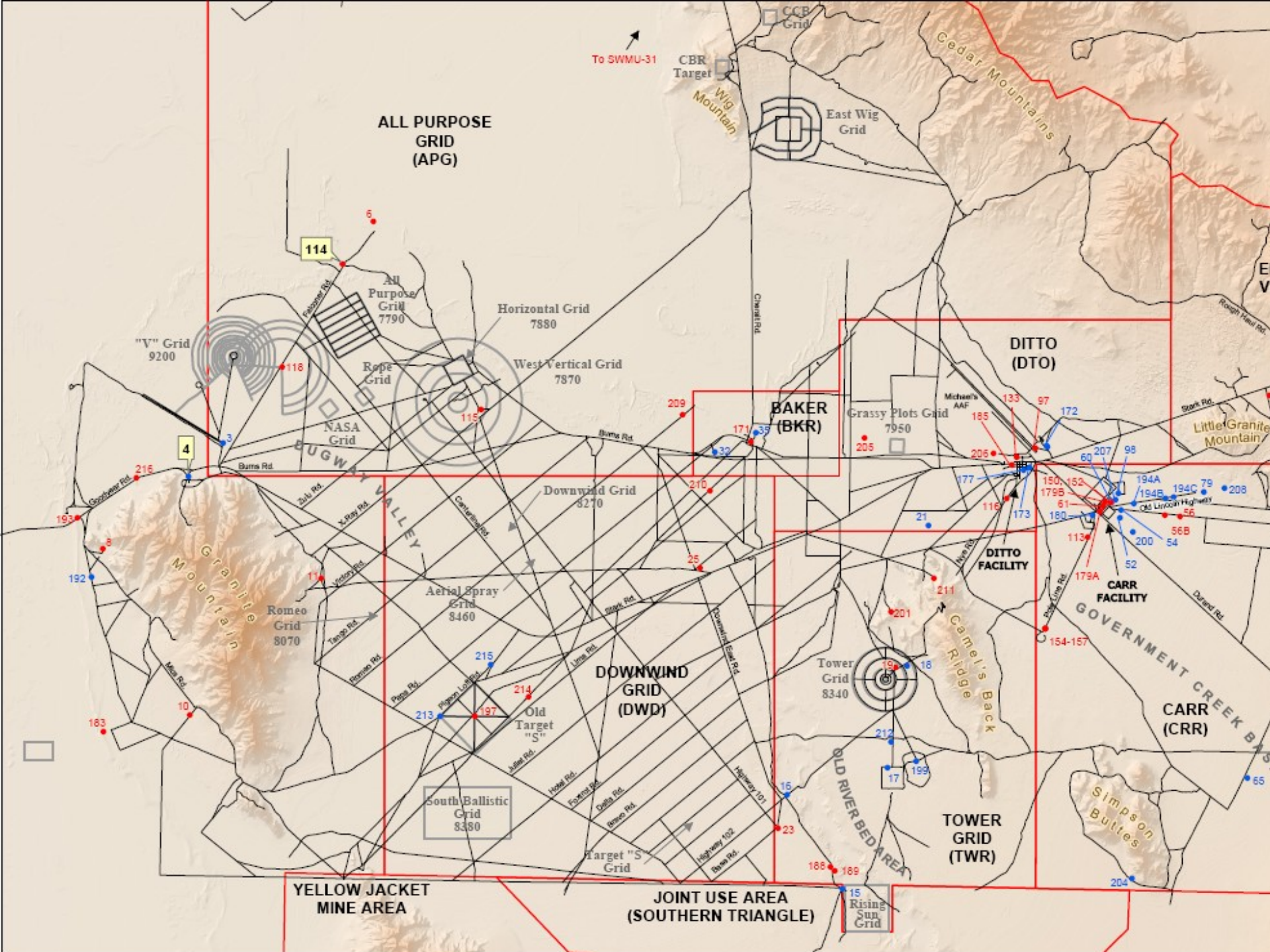
Removal Actions – *Winter 2009*

- **SWMU-35 - Former Baker Lab water treatment plant**
- **SWMUs 4 and 114 - Granite Peak Installation (GPI) sites**

Upcoming Removal Actions:

SWMUs 4 and 114

Former Biological Laboratory Facilities


To SWMU-31
CCR Grid
CBR Target
Wig Mountain
East Wig Grid
Cedar Mountains
ALL PURPOSE GRID (APG)
All Purpose Grid 7790
Horizontal Grid 7880
"V" Grid 9200
Rope Grid
West Vertical Grid 7870
NASA Grid
BUGWAY VALLEY
Granite Mountain
Downwind Grid 8270
BAKER (BKR)
Grassy Plots Grid 7950
DITTO (DTO)
Michael's AAF
Little Granite Mountain
DITTO FACILITY
CARR FACILITY
Aerial Spray Grid 8460
Romeo Grid 8070
DOWNWIND GRID (DWD)
Old Target "S"
Tower Grid 8340
Camel's Back Ridge
GOVERNMENT CREEK BASIN
CARR (CRR)
OLD RIVER BED AREA
TOWER GRID (TWR)
Simpson Buttes
South Ballistic Grid 8380
Target "S" Grid
YELLOW JACKET MINE AREA
JOINT USE AREA (SOUTHERN TRIANGLE)
15 Rising Sun Grid
Burns Rd.
Stark Rd.
Durand Rd.
Rough Haul Rd.
Charlet Rd.
Downwind East Rd.
Highway 101
Highway 102
Romeo Rd.
Tango Rd.
Victory Rd.
Pigeon Loop Rd.
Juliet Rd.
Hotel Rd.
Foxtrot Rd.
Delta Rd.
Bravo Rd.
Mike Rd.
Papa Rd.
Lima Rd.
Ibex Rd.
Ibex Line Rd.
Centerline Rd.
X-Ray Rd.
Zulu Rd.
Grayback Rd.
Fragger Rd.
114
4

SWMU 4

- Granite Peak Installation (GPI)-2, north end of Granite Mountain
- Built 1944 as self-sufficient biological warfare agent testing facility
- Now consists of trenches, surface disposal and burn areas, concrete foundations, abandoned sewer system, and rubble
- Risk Assessment findings: unacceptable risks from concentrations of metals in soil; potential future groundwater impacts

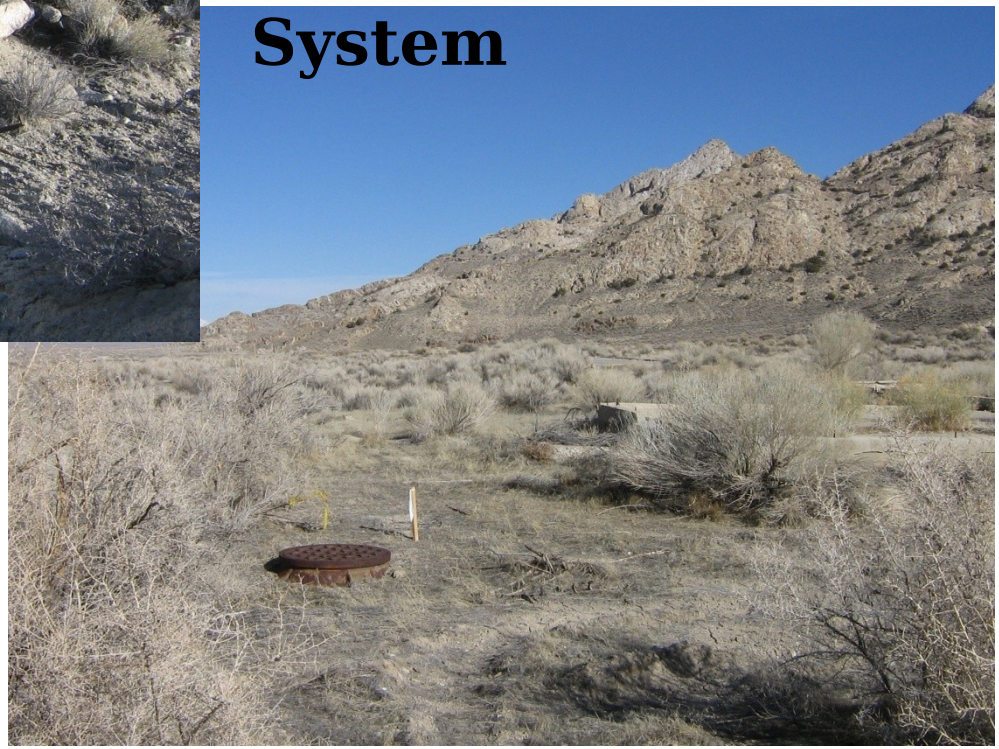
Overview of SWMU 4

Surface Disposal and Burn

Asbestos Cladding in Tank Cradle

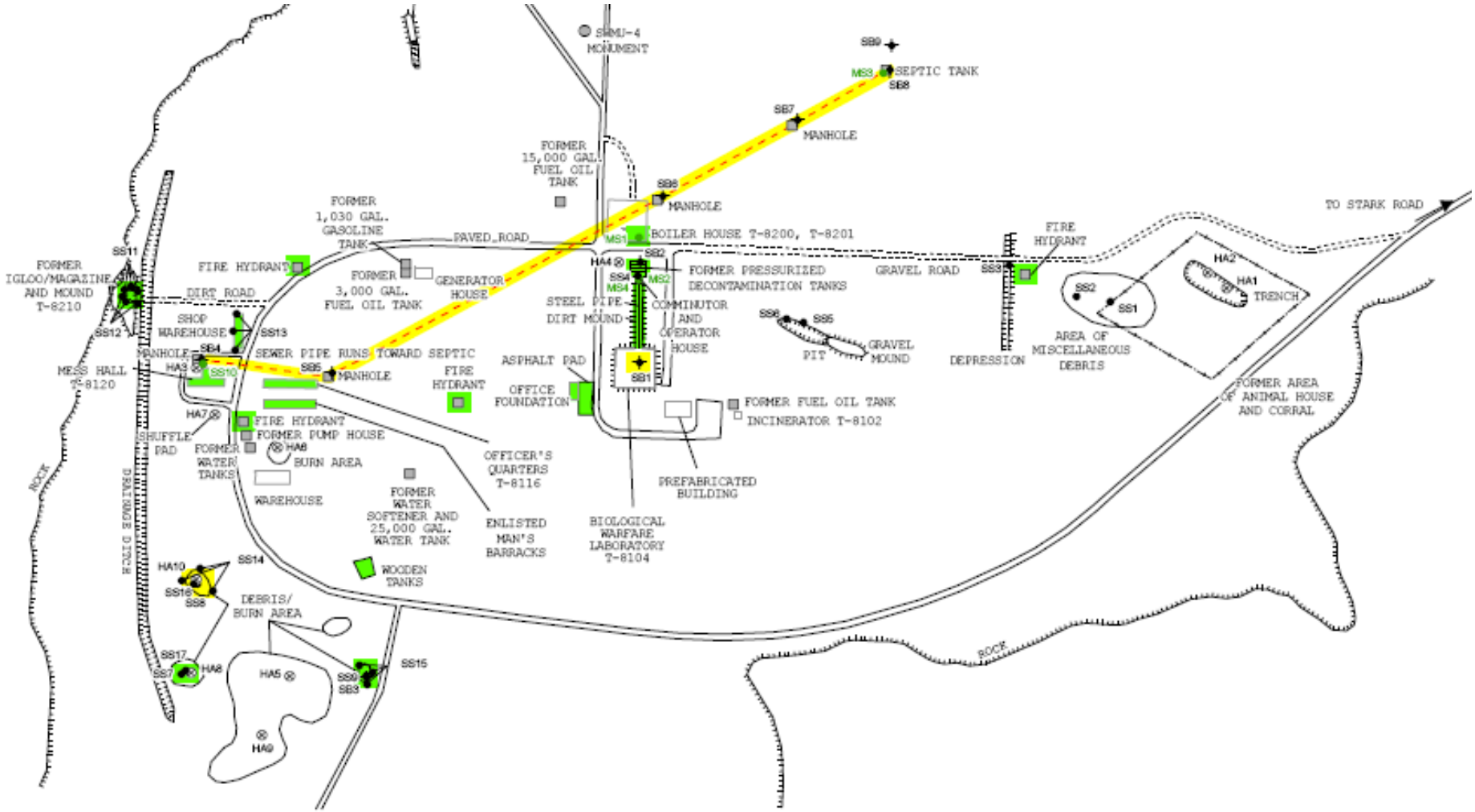
Miscellaneous Debris

Abandoned Sewer System



SWMU 4 Removal Summary

- Impacted soil underlying former Biological Laboratory with the potential to impact groundwater in the future
- Impacted soil and potentially hazardous debris that pose unacceptable human health and ecological risk
- Abandoned sewer line and septic tank
- Ammunition Bunker, Concrete Foundations, and abandoned Wastewater Treatment Concrete Vault (tank cradle)
- Asbestos containing material


SHMU-4 MONUMENT
SEPTIC TANK
MANHOLE
FORMER 15,000 GAL. FUEL OIL TANK
FORMER 1,030 GAL. GASOLINE TANK
PAVED ROAD
BOILER HOUSE T-8200, T-8201
FIRE HYDRANT
FORMER IGLOO/MAGAZINE AND MOUND T-8210
DIRT ROAD
FORMER 3,000 GAL. FUEL OIL TANK
GENERATOR HOUSE
FORMER PRESSURIZED DECONTAMINATION TANKS
GRAVEL ROAD
TO STARK ROAD
SHOP WAREHOUSE
STEEL PIPE DIRT MOUND
COMMINUTOR AND OPERATOR HOUSE
TRENCH
AREA OF MISCELLANEOUS DEBRIS
SEWER PIPE RUNS TOWARD SEPTIC
MESS HALL T-8120
ASPHALT PAD
PIT
GRAVEL MOUND
DEPRESSION
OFFICE FOUNDATION
FORMER FUEL OIL TANK
INCINERATOR T-8102
FORMER AREA OF ANIMAL HOUSE AND CORRAL
SHUFFLE PAD
FORMER PUMP HOUSE
FORMER WATER TANKS
BURN AREA
WAREHOUSE
OFFICER'S QUARTERS T-8116
PREFABRICATED BUILDING
FORMER WATER SOFTENER AND 25,000 GAL. WATER TANK
ENLISTED MAN'S BARRACKS
BIOLOGICAL WARFARE LABORATORY T-8104
WOODEN TANKS
DEBRIS/ BURN AREA
ROCK
DRAINAGE DITCH

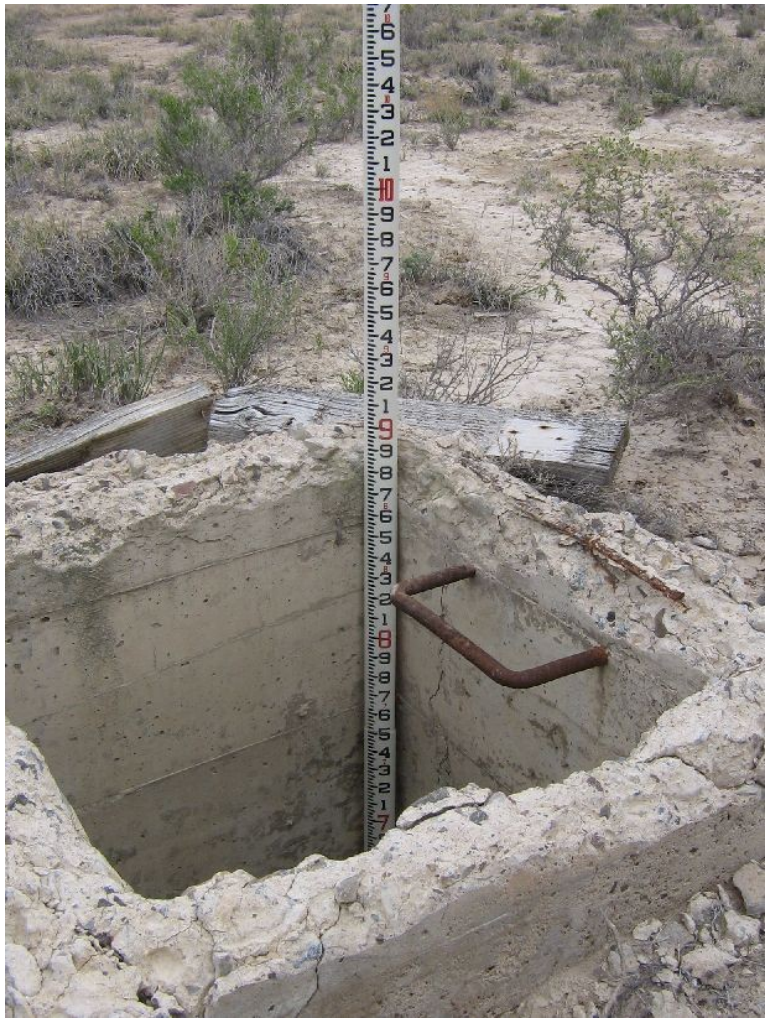
SWMU 114

- Granite Peak Installation (GPI)-3, on Falconer Road northeast of V-Grid
- Believed to be the operational facility for outdoor testing of BWA on the Triangle Grid
- Now consists of building foundations (including tank cradle), pits, debris piles, a manhole, and some large steel tanks.

Overview of SWMU 114

Steel Tanks

Mound of concrete/debris

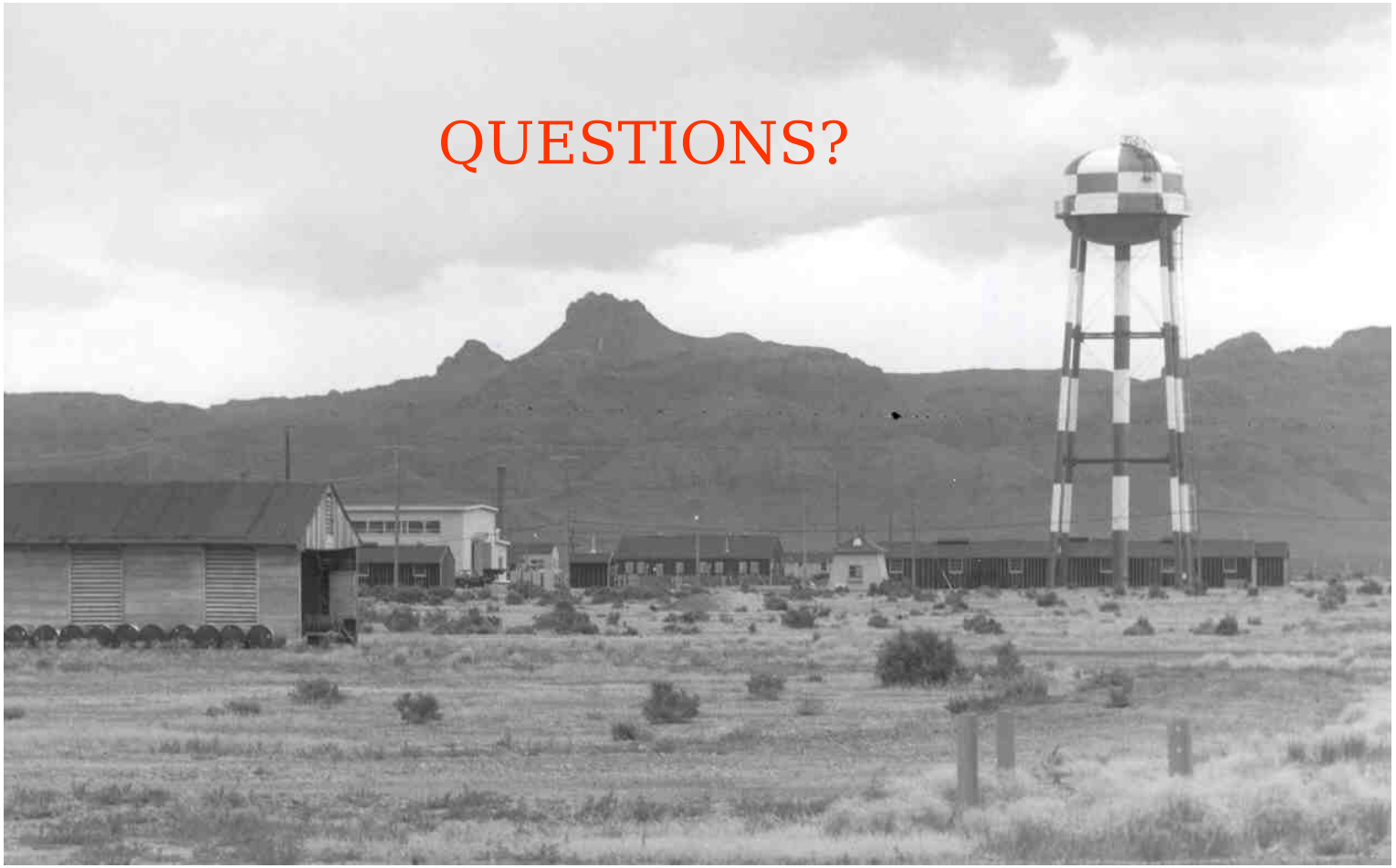


Septic Tank

Abandoned Sewer Line

SWMU 114 Removal Summary

- Concrete mounds and associated debris
- Sewer line and septic tank
- Concrete in place, tank cradle and associated debris
- Scrap metal, piping, tanks
- Removal of the asbestos tile and other waste at associated site SWMU-202
- Backfill and Regrade


QUESTIONS?